REMARKS

The Final Office Action (hereinafter the Action) mailed November 15, 2005, has been reviewed and these remarks are responsive thereto. Claims 1, 20 and 21 have been amended. Claims 1-30 remain pending in this application and currently stand rejected.

Claim Rejections Under 35 U.S.C. §103

The Action rejected claims 1-3, 5, 8-13, 15-17, 19-22, 24-26 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,956,681 to Yamakita (hereinafter *Yamakita*) in view of U.S. Patent No. 6,868,525 to Szabo (hereinafter *Szabo*). Applicant respectfully submits that the amended claims overcome this rejection and add no new matter.

Amended Claim 1 recites a computer system for applying mode bias to an input field of an electronic document of an application comprising, *inter alia*, an input engine in communication with the hierarchical based schema registry, wherein the hierarchical based schema registry receives a schema name based on a hierarchical analysis of an input to the input field from the application, locates a grammar having a language setting, a locale setting and associated with the schema name and sends the grammar to the input engine.

Amended Claim 20 recites a computer system for applying mode bias to an input field of an electronic document of an application comprising, *inter alia*, a hierarchical based schema registry in communication with the application, the hierarchical based schema registry operable to point to code for dynamically generating one or more grammars, wherein the one or more grammars are used to identify an input method.

Amended Claim 21 recites a computer-implemented method for applying mode bias to an input field of an electronic document of an application program module comprising, *inter alia*, determining a mode bias schema that is attached to the input field, wherein the determination of a mode bias schema uses a ranked list of mode bias schemas.

Yamakita discloses a communication environment using a mobile terminal, a speech recognition function as a user interface of the mobile terminal at a practical accuracy and cost and to enable generation/transmission of an E-mail or FAX document as formatted text data on the basis of the recognition result. (*See Yamakita* column 2, lines 18-23.) *Yamakita* also discloses a formatted text generation section 118 determines a field of the recognized speech text

data output from a text speech recognition section 117 using a format type data which is designated from a mobile terminal 101 together with a text speech recognition/formatting start request command, and a format type field dictionary. (*See Yamakita* column 5, lines 34-40.) In addition, *Yamakita* discloses a packet transmission/reception section 115 (FIG. 1) in a speech control host unit 108 recognizes a value set in a "destination port number" field of a TCP header of a received TCP segment, thereby determining an application executed by the speech control host unit 108 as a transfer destination of data stored in the "data" field of the TCP segment. (*See Yamakita* column 16, lines 22-28.)

Szabo discloses a personal services infrastructure.TM., which unifies the visual environment through the use of stylized taxonomic trees and timelines ("maps"). (*See Szabo* column 17, lines 41-44.) *Szabo* also discloses using a user hierarchal schema having documents for providing similar or related information classified together, wherein this similarity or relatedness is not defined intrinsically in the query. (*See Szabo* column 21, lines 38-45.)

The Office Action acknowledges that *Yamakita* fails to teach or suggest a schema registry as a hierarchical based schema registry and a hierarchical analysis of an input to an input field. In order to overcome this deficiency in *Yamakita*, the Office Action relies on *Szabo*. However, *Szabo* fails to remedy all the disclosed deficiencies in *Yamakita*.

In contrast, the combination of *Yamakita* and *Szabo* fails to teach or suggest an input engine in communication with the hierarchical based schema registry, wherein the hierarchical based schema registry receives a schema name based on a hierarchical analysis of an input to the input field from the application, locates a grammar having a language setting, a locale setting and associated with the schema name and sends the grammar to the input engine, as recited in Claim 1. Applicant respectfully submits that *Yamakita* fails to teach a grammar and merely recognizes words as text data and is responsive to a keyword. (*See Yamakita* column 5, lines 34-40.) Even assuming *arguendo* that *Yamakita* does disclose the use of a grammar, *Yamakita* fails to mention a grammar that has a language setting and a locale setting. *Yamakita* merely recognizes keywords recited in different languages by a user, and does not utilize either a language setting or a locale setting. (*See Yamakita* column 35, lines 43-64.) *Szabo* fails to teach or suggest a grammar, and therefore cannot teach or suggest a language setting or locale setting for use with a grammar. Accordingly, independent Claim 1 patentably distinguishes the present invention over

the cited prior art, and Applicant respectfully requests withdrawal of this rejection of Claim 1. Dependent Claims 2-19 are also allowable at least for the reasons described above regarding Independent Claim 1, and by virtue of their dependency upon independent Claim 1. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claims 2-19.

The combination of *Yamakita* and *Szabo* fails to teach or suggest a hierarchical based schema registry in communication with the application, the hierarchical based schema registry operable to point to code for dynamically generating one or more grammars, wherein the one or more grammars are used to identify an input method, as recited in Claim 20. As mentioned above with respect to Claim 1, applicant submits that *Yamakita* fails to teach or suggest the use of a grammar. However, even if *Yamakita* disclose the use of a grammar, *Yamakita* fails to teach or suggest a grammar that is used to identify an input method. While *Yamakita* may mention multiple user interfaces, *Yamakita* is directed to speech recognition and does not need to identify an input method because the input method for *Yamakita* is speech. (*See Yamakita* column 1 lines 61 through column 2 line 23.) As mentioned above with respect to Claim 1, *Szabo* fails to teach or suggest a grammar, and therefore cannot teach or suggest a grammar that is used to identify an input method. Accordingly, independent Claim 20 patentably distinguishes the present invention over the cited prior art, and Applicant respectfully requests withdrawal of this rejection of Claim 20.

The combination of *Yamakita* and *Szabo* fails to teach or suggest determining a mode bias schema that is attached to the input field, wherein the determination of a mode bias schema uses a ranked list of mode bias schemas, as recited in Claim 21. While *Yamakita* may disclose using various schema designated by a user, *Yamakita* fails to mention using a ranked list of mode bias schemas. (*See Yamakita* column 35 lines 43-64.) *Szabo* mentions that using lists for use in indicating a structure of available information, and therefore teaches away the use of any list. (*See Szabo* column 7, lines 40-49.) In addition, even assuming *arguendo* that *Szabo* promoted the use of list, *Szabo* still fails to disclose using a list of mode bias schemas, much less a ranked list of mode bias schemas. Accordingly, independent Claim 21 patentably distinguishes the present invention over the cited prior art, and Applicant respectfully requests withdrawal of this rejection of Claim 21. Dependent Claims 22-26 are also allowable at least for the reasons

described above regarding Independent Claim 21, and by virtue of their dependency upon independent Claim 21. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claims 22-26.

The Action rejected claims 4, 6, and 7 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, and further in view of U.S. Publication No. 2001/0041328 to Fisher (hereinafter *Fisher*). Applicant respectfully submits that the amended claims overcome this rejection and add no new matter.

As mentioned above, the combination of *Yamakita* and *Szabo* fails to teach or suggest all the limitations of Claim 1. Accordingly, Dependent Claims 4, 6, and 7 are also allowable over the combination of *Yamakita* and *Szabo* at least for the reasons described above regarding Independent Claim 1 and by virtue of their dependency upon independent Claim 1.

Fisher discloses a computer simulation process, apparatus, and multimedia game intended for simulated, foreign travel experiences and simulated, foreign language environments. (*See Fisher* paragraph [0004].) *Fisher* discloses that the simulator produces a user-character dialogue simulation by digitizing video or transferring digital video content to a computer system, which is suitable for digital video editing and image editing. (*See Fisher* paragraph [0036].) *Fisher* also discloses that the simulator produces a user-character dialogue simulation by segmenting the video according to content, which is based on semantic structures, grammar, gestures, and other features of communication. (*See Fisher* paragraph [0036].)

The combination of *Yamakita*, *Szabo* and *Fisher* fails to teach or suggest all the limitations of Claim 1. *Fisher* fails to teach or suggest an input engine in communication with the hierarchical based schema registry, wherein the hierarchical based schema registry receives a schema name based on a hierarchical analysis of an input to the input field from the application, locates a grammar having a language setting, a locale setting and associated with the schema name and sends the grammar to the input engine, as recited in Claim 1. *Fisher* fails to mention a grammar, much less a grammar having a language setting, a locale setting and associated with the schema name. Accordingly, independent Claim 1 patentably distinguishes the present invention over the cited prior art. Dependent Claims 4, 6, and 7 are also allowable at least for the reasons described above regarding Independent Claim 1, and by virtue of their dependency upon

independent Claim 1. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claims 4, 6, and 7.

The Action rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita* in view of *Szabo* and further in view of U.S. Patent No. 6,434,567 to De La Huerga (hereinafter *De La Huerga '567*). Applicant respectfully submits that the amended claims overcome this rejection and add no new matter.

As mentioned above, the combination of *Yamakita* and *Szabo* fails to teach or suggest all the limitations of Claim 1. Accordingly, Dependent Claim 14 is also allowable over the combination of *Yamakita* and *Szabo* at least for the reasons described above regarding Independent Claim 1 and by virtue of its dependency upon independent Claim 1.

De La Huerga discloses a system including predefined address format fields and corresponding instantiation rule sets which can be used to quickly define address formats for use by an enterprise computing system. (*See De La Huerga* column 6, lines 45-49.) *De La Huerga* also discloses a system in which address formats can be specified once for all processing devices (e.g. databases, servers, applications, data collection devices, etc.). (*See De La Huerga* column 6, lines 49-52.) In addition, *De La Huerga* discloses a VSRS 72 that includes a rule set which is used to search any information set for any date specifying information which can be used to instantiate variable field 62. (*See De La Huerga* column 10, lines 7-9.) To this end, VSRS 72 specifies a separate rule corresponding to each possible format in which a date might appear in an information set (see exemplary rules in VSRS 72). (*See De La Huerga* column 10, lines 9-12.)

The combination of *Yamakita*, *Szabo* and *De La Huerga* fails to teach or suggest all the limitations of Claim 1. *De La Huerga* fails to teach or suggest an input engine in communication with the hierarchical based schema registry, wherein the hierarchical based schema registry receives a schema name based on a hierarchical analysis of an input to the input field from the application, locates a grammar having a language setting, a locale setting and associated with the schema name and sends the grammar to the input engine, as recited in Claim 1. *De La Huerga* fails to mention a grammar, much less a grammar having a language setting, a locale setting and associated with the schema name. Accordingly, independent Claim 1 patentably distinguishes the present invention over the cited prior art. Dependent Claim 14 is also allowable at least for

the reasons described above regarding Independent Claim 1, and by virtue of its dependency upon independent Claim 1. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claim 14.

The Action rejected claims 18 and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita* in view of U.S. Patent No. 5,895,461 to De La Huerga (hereinafter *De La Huerga '461*). Applicant respectfully submits that the amended claims overcome this rejection and add no new matter.

As mentioned above, the combination of *Yamakita* and *Szabo* fails to teach or suggest all the limitations of Claims 1 and 21. Accordingly, Dependent Claims 18 and 23 are also allowable over the combination of *Yamakita* and *Szabo* at least for the reasons described above regarding Independent Claim 1 and 21, respectively, and by virtue of their dependency upon independent Claims 1 and 21.

De La Huerga '461 discloses a specialized word processor for accepting and recognizing keywords input by the creator of a data record and storing the record at a predetermined location which will be referenced by a hypertext link associated with the keywords. (*See De La Huerga '461* column 6, lines 33-39.) *De La Huerga '461* also discloses that the specialized word processor checks the format of data for the proper length and corrects characters input by a user. *See De La Huerga '461* column 6, lines 50-55.)

The combination of *Yamakita*, *Szabo* and *De La Huerga '461* fails to teach or suggest all the limitations of Claim 1. *De La Huerga '461* fails to teach or suggest an input engine in communication with the hierarchical based schema registry, wherein the hierarchical based schema registry receives a schema name based on a hierarchical analysis of an input to the input field from the application, locates a grammar having a language setting, a locale setting and associated with the schema name and sends the grammar to the input engine, as recited in Claim 1. *De La Huerga '461* fails to mention a grammar, much less a grammar having a language setting, a locale setting and associated with the schema name. Accordingly, independent Claim 1 patentably distinguishes the present invention over the cited prior art. Dependent Claim 18 is also allowable at least for the reasons described above regarding Independent Claim 1, and by virtue of its dependency upon independent Claim 1. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claim 18.

The combination of *Yamakita*, *Szabo* and *De La Huerga '461* fails to teach or suggest all the limitations of Claim 21. *De La Huerga '461* fails to teach or suggest determining a mode bias schema that is attached to the input field, wherein the determination of a mode bias schema uses a ranked list of mode bias schemas, as recited in Claim 21. *De La Huerga '461* fails to mention a mode bias schema, much less a determination using a ranked list of mode bias schemas. Accordingly, independent Claim 21 patentably distinguishes the present invention over the cited prior art. Dependent Claim 21 is also allowable at least for the reasons described above regarding Independent Claim 21, and by virtue of its dependency upon independent Claim 21. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claim 23.

The Action rejected claims 27-29 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita* in view of U.S. Patent No. 6,519,603 to Bays, et al. (hereinafter *Bays*) in further view of *Szabo*. Applicant respectfully traverses the rejection.

Claim 27 recites a computer-implemented method for determining a semantic category of a string in an electronic document based upon a mode bias schema comprising, *inter alia*, saving the mode bias schema as a semantic category label in association with the input string.

Bays discloses a method and apparatus for capturing annotations about database material in a way that allows queries with conditions or predicates on both the database material and the annotations. (*See Bays* column 2, lines 10-14.) Database material may be text, graphics, spreadsheets, relational tables or any other material which may be stored and indexed. (*See Bays* column 2, lines 14-16.) An annotatable data item (i.e. the subsection of database material that can be annotated) is any entity referenced by an index (e.g. by an object identifier) or any attribute or subcomponent of such an entity, or any arbitrary set of such items. (*See Bays* column 2, lines 16-20.) *Bays* also discloses that annotations may be captured in structured form to enhance queryability and semantic interpretation as well as to provide some order for users to enter this additional information content. (*See Bays* column 2, lines 47-50.)

The combination of *Yamakita*, *Bays*, and *Szabo* fails to teach or suggest all the limitations of Claim 27. The combination of *Yamakita*, *Bays*, and *Szabo* at least fails to teach or suggest saving the mode bias schema as a semantic category label in association with the input string, as recited in Claim 27. As acknowledged in the Office Action, both *Yamakita*, and *Szabo* fails to

disclose saving a mode bias schema as a semantic category label in association with an input string. While *Bays* may mention a semantic interpretation, Bays merely captures annotations of data input by a user to enhance semantic interpretation and does not save a mode bias schema as a semantic category label. (*See Bays* column 2, lines 47-50.) Accordingly, independent Claim 27 patentably distinguishes the present invention over the cited prior art, and Applicant respectfully requests withdrawal of this rejection of Claim 27. Dependent Claims 28-30 are also allowable at least for the reasons described above regarding Independent Claim 27, and by virtue of their dependency upon independent Claim 27. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claims 28-30.

The Action rejected claim 30 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita* in view of *Bays*, in view of *Szabo* and further in view of U.S. Patent No. 6,182,029 to Friedman (hereinafter *Friedman*). Applicant respectfully traverses the rejection.

As mentioned above, the combination of *Yamakita*, *Bays*, and *Szabo* fails to teach or suggest all the limitations of Claim 27. Accordingly, Dependent Claim 30 is also allowable over the combination of *Yamakita*, *Bays*, and *Szabo* at least for the reasons described above regarding Independent Claim 27 and by virtue of its dependency upon independent Claim 27.

Friedman discloses a natural language processing system for extracting information from a natural language document input that can be easily adapted for use in a variety of areas of expertise by modifying, if necessary, one or more corresponding knowledge components. (*See Friedman* column 4, lines 49-53.) *Friedman* also discloses a document tagging schema that uses a document structure based on Extensible Markup Language (XML), a subset of Standard Generalized Markup Language (SGML), designed for ease of implementation and interoperability with SGML and HTML standards used by most Internet web browsers. (*See Friedman* column 12, lines 21-28.)

The combination of *Yamakita*, *Bays*, *Szabo*, and *Friedman* fails to teach or suggest all the limitations of Claim 27. The combination of *Yamakita*, *Bays*, *Szabo*, and *Friedman* at least fails to teach or suggest saving the mode bias schema as a semantic category label in association with the input string, as recited in Claim 27. *Friedman* merely discloses a system for extracting information from a natural language document, and fails to teach or suggest saving a mode bias schema as a semantic category label. (*See Friedman* column 4, lines 49-53.) In addition,

Applicant submits that the use of four references as a basis for obviousness to reject Claim 30 suggest that Claim 30 is unobviousness. Accordingly, independent Claim 27 patentably distinguishes the present invention over the cited prior art. Dependent Claim 30 is also allowable at least for the reasons described above regarding Independent Claim 27, and by virtue of its dependency upon independent Claim 27. Accordingly, Applicant respectfully requests withdrawal of this rejection of dependent Claim 30.

CONCLUSION

A request for a three-month extension of time is requested for the period of February 15, 2006 through May 15, 2006, and is submitted with this amendment.

In view of the foregoing amendments and remarks, Applicants respectfully submits that the present application is in condition for allowance. Reconsideration and reexamination of the application and allowance of the claims at an early date are hereby solicited. If the Examiner has any questions or comments concerning this matter, the Examiner is invited to contact the applicant's undersigned attorney at the number below.

Respectfully submitted,

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